

Prevention Tips

- Avoid direct contact with water that has unusual color, odor, or where advisory signs are posted. This means no swimming, wading, paddling, diving, or water-skiing in affected waters.
- If direct contact has been made with water containing cyanobacteria, wash off with fresh water. In some cases, skin irritation will appear after prolonged exposure. If symptoms persist, consult your local health care provider.
- Never drink untreated water. Do not drink water from an area where cyanobacteria have been identified.
- Do not let children, pets, or livestock get into or drink from affected waters.
- People that are prone to respiratory allergies or asthma should avoid areas with cyanobacterial blooms.
- Do not eat internal organs of fish caught in waters containing cyanobacteria. If you have cleaned fish taken from affected waters, thoroughly wash any of your skin that has come into contact with the fish.
- Use rubber gloves if contact with affected waters must be made.



Harmful Algal Blooms
VDH Hotline
1-888-238-6154

Cyanobacteria
(Blue-Green Algae)



Photo Credit: Yvonne Johnson, Fairfax County Park Authority

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WWW.VDH.VIRGINIA.GOV/EPIDEMIOLOGY/DEE/HABS

VDH VIRGINIA
DEPARTMENT
OF HEALTH
Protecting You and Your Environment
www.vdh.virginia.gov

What are Cyanobacteria?

Cyanobacteria are single-celled organisms that naturally exist, mostly in freshwaters. Sunlight is used as their primary energy source and cells can grow rapidly or “bloom” when water is warm, stagnant, and excess nutrients are in the water such as nitrogen and phosphorous. Cyanobacterial blooms may produce a film or surface scum on the water that is most commonly a green or blue-green color. Cyanobacterial blooms occur mostly in the late spring, summer, and fall.

Toxic Cyanobacterial Blooms

Some cyanobacteria produce toxins that are harmful to people and animals, and are often referred to as Harmful Algal Blooms (HABs). Cyanotoxins can affect the liver and central nervous system. One of the common cyanotoxins is microcystin and is most commonly produced by the cyanobacteria, *Microcystis aeruginosa*.

Animal & Fish Effects

Animals and pets can be seriously harmed from drinking water with high levels of cyanobacteria or cyanotoxins. Animals licking a wet coat of fur from waters affected with cyanobacteria or toxins can also lead to illness or death. When cyanobacterial blooms dissipate and decay, the dissolved oxygen in the water can be depleted and fish may die as a result.

Human Health Effects

Cyanobacteria can cause illness in people if exposed to water containing cyanotoxins or cell components in the following ways:

Ingestion:

Abdominal pain, nausea, vomiting, diarrhea, and liver damage can result from swallowing affected waters.

Dermal Contact:

Skin irritation, rashes, itching, conjunctivitis, and eye irritation can result from direct skin contact with affected waters.

Inhalation:

Respiratory irritation such as chest tightness, shortness of breath, coughing, and wheezing can result from breathing air or aspirating affected waters.

Are Fish Safe to Eat?

The consumption of fish flesh (muscle) is considered safe. However, some cyanotoxins can accumulate in fish organs such as the liver, kidney, stomach, and intestines.

Before eating, thoroughly clean the fish, discard organs, and wash hands afterwards.

VDH Algal Bloom Surveillance Map

<http://www.vdh.virginia.gov/epidemiology/DEE/HABS/HABmap.htm>

WARNING



HARMFUL ALGAE HAVE BEEN DETECTED IN THE WATER. PEOPLE AND PETS SHOULD AVOID SWIMMING, ESPECIALLY NEAR SURFACE SCUM UNTIL FURTHER NOTICE.

The consumption of fish is considered safe. However, VDH recommends thoroughly cleaning fish, discarding organs, and washing hands afterwards.

For more information call:
VDH, Harmful Algal Bloom (HAB) Hotline – (888) 238-6154
<http://www.vdh.virginia.gov/epidemiology/DEE/habs/cyanobacteria/index.htm>



Report Cyanobacterial Blooms

If you see a cyanobacterial bloom, water of an abnormal color, or a fish kill, please call:

**Dept. of Environmental Quality
(804) 698-4000**

Report Suspected Illnesses

If you are concerned that you have symptoms from exposure to cyanobacteria, please see your doctor, call your local health department, and please call:

**VDH Harmful Algal Bloom Hotline
1-888-238-6154**

Telling your doctor about contact with water may help him/her treat the illness properly.

